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# MANPOWER AND PERSONNEL DATA BASES IN THE NAVY AND MARINE CORPS

by

Kneale T. Marshall

February 1973

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This report contains information on the availability of manpower and personnel data in the Navy and Marine Corps and at Federal Contract Research Centers. The report includes a brief description of various kinds of data, summaries of various data banks, and some comments on the use of personnel data.

Prepared by:

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1. Introduction.

This report contains information on the location and type of data which is available primarily in the U. S. Navy and Marine Corps on manpower and personnel. As a general rule the word "manpower" refers to positions, billets or requirements. Thus, by manpower data we mean data, not on individuals or on groups of people, but on requirements for people. "Personnel" usually refers to people. Thus "personnel data" is data on individuals or on groups of individuals who are either still active in the force or who have left or are in an inactive state. These word usages are common among Navy and Marine Corps manpower and personnel planners and managers.

The information in this report has been gathered at the request of the Office of Naval Research for two purposes. The first purpose is to provide civilian (as well as military) researchers who are engaged in manpower and personnel research, with information on what type of data is available and where it is located. Initial points of contact are given. The second purpose is as the first step in a study to determine the feasibility of starting and maintaining a separate centralized data base for use primarily by researchers in the manpower and personnel areas. Such a feasibility study cannot be completed at this time but will be the subject of a later report. Only when it is known what data is currently available, and how well this data fills the requirements of the researchers, will it be possible to sensibly tackle the question of a separate centralized data base.

In Section 2 of this report we discuss various types of data and whether or not each type is available. In Section 3 we list the various sources for which we have information. We have tried to be comprehensive in our listing, but possibly some data sources will have been overlooked. We have made no attempt to list all possible data sources in all branches of the military, and have not included any civilian data sources other than Federal Contract Research Centers. Our list includes those data sources used and available within the Navy and Marine Corps and data on recruits at the Army Recruiting Command. In Section 4 we describe some of the pitfalls of asking for data without a thorough understanding of the operations of the service. Most of these are from experience and are meant as examples only, and do not form a complete list. The potential user of any data from any source is warned to be very careful to find out exactly the nature of the data he is using. Whenever possible it is advisable to establish contact with a researcher who has previously used similar data to avoid the pitfalls that are inherent in most of the data sources.

2. Data Types.

In this section we discuss briefly various types of data. Certain researchers will require data on individuals. For example, researchers interested in effects of incentive schemes, or those interested in relating job performance to test scores will need data on individuals. Other researchers will be content with aggregated or sampled data on groups. Attrition rates, for example, can be calculated without knowledge of individual behavior.

Almost all data available is cross-sectional data. That is, data is kept on the force, or a particular branch of the force, at a particular point in time. The enlisted master tape, for example, has on it all individuals on active duty in the Navy at a particular point in time (this is a simplified statement, and the reader is cautioned to read Section 4). Since virtually all data bases are designed for support of the operations of the force it is natural that data be kept in this manner. It is expected that many researchers will ask for data on, say, an individual's progress through the Navy, or on how a group of incoming people behaved as they passed through the system. We call such data longitudinal or cohort data and very little of it is available in easily accessible form.

Table 1 is a simple summary of the above remarks. It will help the potential data seeker avoid many frustrations if he can categorize his data needs into one or more of these four types.

To further clarify these categories of data we give examples. Table 2 shows a sample of the kind of data available on each individual

| | Individuals | Groups |
|---|---|---|
| Cross Sectional | Available | Available |
| Longitudinal | Available on very limited basis | Available on very limited basis |

Table 1. Simple Categories of Data.

on the enlisted master tape at a given point in time. We stress that this table contains only a sample of fictitious data. A more detailed description is contained in Section 3, and a complete description is given in Reference 1.

| | |
|---|---|
| Social Security Number | 123-45-6789 |
| Name | Smith, John Q. |
| Present Rate | E5 |
| NEC | Sonar Technician |
| Education-Aptitude | (AFQT Scores, Advanced Technician Test scores, etc.) |
| Pay Entry Base Date | 3 June 1968 |
| Active Duty Base Date | 1 July 1968 |
| Date at Birth | 3 September 1949 |
| ⋮ | ⋮ |

Table 2. Sample of Individual Data on Enlisted Master Tape.

Table 3 shows a sample of data available on groups at a given point in time, which has been compiled from the individual data. It shows the numbers of Boatswain's Mates in Rates E1 through E9 on the enlisted master tape on active duty on 30 June 1971.

| Yrs Service | E9 | E8 | E7 | E6 | E5 | E4 | E3 | E2 | E1 | E1/E9 |
|---|---|---|---|---|---|---|---|---|---|---|
| 1 yr | | | | | 1 | 11 | | 1 | 1 | 14 |
| 2 yrs | | | 1 | 1 | 4 | 189 | 6 | 5 | | 206 |
| 3 yrs | | | 2 | 2 | 220 | 1296 | 29 | 3 | 1 | 1553 |
| 4 yrs | | | | 1 | 430 | 1018 | 47 | 8 | 4 | 1508 |
| 5 yrs | | | 3 | 10 | 177 | 186 | 7 | 2 | 2 | 387 |
| 6 yrs | 1 | 1 | 1 | 32 | 256 | 121 | 12 | 2 | 2 | 428 |
| 7 yrs | | | 3 | 73 | 247 | 112 | 9 | 2 | 1 | 447 |
| 8 yrs | | 2 | 2 | 143 | 212 | 64 | 11 | 2 | 3 | 439 |
| 9 yrs | 1 | | 9 | 210 | 189 | 36 | 5 | | | 450 |
| 10 yrs | | | 24 | 309 | 194 | 26 | 2 | | | 555 |
| 11 yrs | 2 | | 59 | 325 | 120 | 12 | | | | 518 |
| 12 yrs | | | 87 | 264 | 91 | 12 | | | | 454 |
| 13 yrs | | 1 | 111 | 234 | 50 | 4 | | | | 400 |
| 14 yrs | 1 | 1 | 111 | 178 | 43 | 6 | 2 | | | 342 |
| 15 yrs | 2 | 2 | 106 | 177 | 37 | 7 | 1 | | | 332 |
| 16 yrs | | 1 | 147 | 243 | 69 | 5 | 1 | | | 466 |
| 17 yrs | | 4 | 196 | 246 | 59 | 10 | | | | 513 |
| 18 yrs | | 6 | 98 | 105 | 25 | 1 | 2 | | | 237 |
| 19 yrs | 2 | 22 | 199 | 171 | 28 | 4 | 1 | | | 427 |
| 20 yrs | 1 | 44 | 258 | 147 | 28 | 6 | | | | 484 |
| 21 yrs | 2 | 25 | 70 | 26 | 4 | | | | | 127 |
| 22 yrs | 5 | 11 | 33 | 6 | | | | | | 55 |
| 23 yrs | 6 | 19 | 64 | 10 | 1 | | | | | 100 |
| 24 yrs | 9 | 37 | 93 | 16 | 1 | | | | | 156 |
| 25 yrs | 13 | 34 | 42 | 10 | 1 | | | | | 100 |
| 26 yrs | 25 | 28 | 49 | 16 | 1 | | | | | 119 |
| 27 yrs | 18 | 24 | 31 | 8 | | | | | | 81 |
| 28 yrs | 12 | 24 | 40 | 8 | 1 | | | | | 85 |
| 29 yrs | 27 | 43 | 30 | 6 | 1 | 1 | | | | 108 |
| 30 yrs & over | 32 | 37 | 27 | 9 | 4 | 1 | | | | 110 |
| TOTAL | 159 | 336 | 1896 | 2986 | 2492 | 3128 | 135 | 25 | 14 | 11201 |

Table 3. Enlisted Personnel on Active Duty as of 06-30-71 as Boatswain's Mates.

Initial Strength = 2034

| Month after start | Losses by Groups R1 | R2 | R3 | R4 | Row Total | Number Remaining |
|---|---|---|---|---|---|---|
| 1 | 38 | | | | 38 | 1996 |
| 2 | 36 | | | | 36 | 1960 |
| 3 | 15 | | | | 15 | 1945 |
| 4 | 10 | | | | 10 | 1935 |
| 5 | 5 | | | | 5 | 1930 |
| 6 | 11 | | | | 11 | 1919 |
| 7 | 32 | | | 3 | 35 | 1884 |
| 8 | 20 | | | | 20 | 1864 |
| 9 | 10 | | | | 10 | 1854 |
| 10 | 22 | | | 8 | 30 | 1824 |
| 11 | 10 | | | | 10 | 1814 |
| 12 | 14 | | | 1 | 15 | 1799 |
| 13 | 10 | 1 | | | 11 | 1788 |
| 14 | 11 | 1 | | | 12 | 1776 |
| 15 | 15 | | | | 15 | 1761 |
| 16 | 13 | 1 | 5 | 1 | 20 | 1741 |
| 17 | 19 | 2 | 10 | | 31 | 1710 |
| 18 | 15 | 2 | 73 | 1 | 91 | 1619 |
| 19 | 18 | | 376 | | 394 | 1225 |
| 20 | 5 | 1 | 205 | | 211 | 1014 |
| 21 | 10 | 2 | 72 | | 84 | 930 |
| 22 | 19 | 6 | 110 | | 135 | 795 |
| 23 | 16 | 1 | 137 | | 154 | 641 |
| 24 | 17 | 5 | 432 | | 454 | 187 |
| 25 | 13 | | 33 | | 46 | 141 |
| 26 | 7 | | 17 | | 24 | 117 |
| 27 | 4 | | 18 | | 22 | 95 |
| 28 | 4 | | 3 | | 7 | 88 |
| 29 | 5 | | 6 | | 11 | 77 |
| 30 | 7 | | 2 | | 9 | 68 |
| 31 | 2 | | 0 | | 2 | 66 |
| 32 | 6 | | 2 | | 8 | 58 |
| 33 | 3 | | 2 | | 5 | 53 |
| 34 | 2 | | 1 | | 3 | 50 |
| 35 | 1 | | 4 | | 5 | 45 |
| 36 | 0 | 1 | 5 | | 6 | 39 |
| Total Losses | 445 | 23 | 1513 | 14 | 1995 | |

Table 4. Cohort Data of Marine Corps
Two-year obligors, starting in October 1967.

Table 4 shows data on a group of men who enlisted in the Marine Corps for two years in October 1967. It shows the number who left the Marine Corps each month for any one of the following reasons:

R1: Separated from Marine Corps for various reasons such as mental ability, disciplinary reasons, etc.

R2: Re-enlistments-leave cohort by changing length of obligated service.

R3: Released from active duty (active duty obligation fulfilled).

R4: Accepted as officer candidate - leaves cohort by changing status.

This is a sample of longitudinal data (or cohort data) on a group. No longitudinal data was available on individuals. Although such data is contained in an individual's record file, to the author's knowledge, it is not readily available in easily accessible form within the Navy or Marine Corps in the same way that cross-sectional data is available.

3. Data Sources.

In this section we list the sources of manpower and personnel data on which we have been able to obtain reasonable information regarding content and accessibility. This information was obtained from answers to questionnaires forwarded to each activity in November 1972. For each military activity we list the following:

(1) Brief Description of Activity,
(2) Data Available,
(3) Documentation,
(4) Liaison,
(5) Current Users.

No attempt has been made in (1) to describe in detail the tasks and responsibilities of each activity. Such an effort would be outside the scope of this report. It was thought that a few words about each activity might help a potential civilian data user understand the position of the activity within the military structure.

In (2) we have made no attempt to describe the available data in detail. The description of the enlisted master tape above is contained in a report of approximately 160 pages. Rather we have tried to indicate the special areas in manpower and personnel to which the data pertains.

Not all data sources are documented, and those that are undergo frequent changes. Almost all data bases mentioned are intended to support the operations of the military and thus must be changed to meet changes in operating needs. None of the data bases was intended to be primarily used for research, except those at the Federal Contract Research

Center subject to the limitations described under that heading. Available documentation has been cited in (3) as we determined it from the answers to the questionnaires.

Wherever possible we have attempted to give in (4), the names of contacts where further information can be gained on each data base, together with phone numbers (autovon for researchers who have access to the DOD network). Although the individuals move frequently, we strongly urge any potential user to follow a personal line of communication when attempting to obtain data. Section 4 of this report is intended to point out some of the reasons why this is important.

Current users are listed in (5). This information may be useful in further understanding the type of data in each data bank.

A brief description of the Federal Contract Research Center ends this section.

## Office of Management Information
## Bureau of Naval Personnel (Pers N)

1. Brief Description of Activity.

The Management Information Division of the Bureau of Naval Personnel (Pers N) acts as a service division which supplies information on personnel and manpower data to all sections of the Navy as well as the Department of Defense. Pers N maintains master records on all individuals in the Navy, the enlisted master tape record and the officer master tape record. These are updated on a daily basis as personnel actions become effective. They are the primary sources of data for the personnel side of many operating systems. Pers N also produces numerous statistical reports on a daily, weekly, monthly and yearly basis as well as reports requested for special purposes not on a routine basis.

2. Data Available.

As mentioned above, Pers N maintains two separate master tape records. The enlisted master tape currently consists of about 16 magnetic tapes, with approximately 2400 bytes of information on each of 550,000 enlisted individuals. Thus the entire record is on the order of 1.3 billion bytes in length. This record is accessed sequentially and is updated each night as new information arrives at Pers N. Thus historical data is lost, except for copies of the tape at the end of each six month period, June 30 and December 31 each year.

Each person's record is divided into five sections, namely identification, service, qualifications, education/aptitude, and assignment. A brief description of each follows:

1. Identification Data. This section has 17 items which help identify the individual. These include the persons name, place and date of birth, service and social security numbers, sex, race, dependents and similar data.

2. Service Data. This section has 27 items related to the individual's place in, and obligation to, the service. These include, for example, branch and class of service, type and term of enlistment, active duty obligated time, pay entry and active duty base dates.

3. Qualifications. This section has 32 items related to the individual's qualifications in the Navy. These include, for example, present and prospective rates, Navy enlistment classification codes (NEC's) and language abilities.

4. Education/Aptitude. This section has 19 items including the results of the Armed Forces Qualification Test (AFQT), basis battery test, advanced technician test, etc., and a Navy School history.

5. Assignment Data. This section has 29 items related to the individual current and past assignment, such as present and former duty stations, activity information and prospective assignment data.

In total the enlisted master tape has 124 items of information on each individual.

From this extremely large volume of data Pers N produces a very large number of statistical reports on a regular basis, as well as special reports upon request. One report they produce is report N399 (Ref. 2), entitled "Monthly Directory of Reports." This lists all the reports produced in a given month by number and title, with names of users and frequency of report. For example, in October 1972 Pers N produced 1,764 reports. These are categorized as shown in Table 5. Some typical data which can be obtained from these reports include continuation statistics, promotion statistics, enlisted sea/shore requirements, re-enlistment rates, personnel movement statistics, billet requirements, and others far too numerous to list here. It is recommended that a potential data user first scan the report titles in N399, then scan the reports of interest

before requesting further statistics from Pers N. With such a volume of reports being produced it is highly likely that the data required is already being produced.

3. Documentation.

If information on individuals is required, the potential user should read reference 1, which describes in detail every data element on the enlisted master tape (the user is also cautioned to read section 4 of this report). If he requires certain aggregated data he should consult reference 2 to see if such information is currently being extracted from the tape. Reference 10 should also be consulted. This describes the Navy integrated management information system.

4. Liaison.

Correspondence concerning any of the above data or reports should be addressed to:

Assistant Chief for Management Information
Bureau of Naval Personnel (Pers N)
Washington, D. C. 20370

Current contacts (March 1973) can be made by phone to:

(i) LCDR G. King (Pers N100) at 202-OX4-2341 (Autovon 224-2341)

(ii) LT L. Mairs (Pers N12) at 202-OX4-4033 (Autovon 224-4033)

5. Current Users.

This data base is very heavily used in all areas of the Navy and Department of Defense. Among the regular users are

(i) All divisions of the Bureau of Naval Personnel,
(ii) Chief of Naval Operations,
(iii) Various Department of Defense Agencies,
(iv) Bureau of Medicine,
(v) Personnel Research Laboratories,
(vi) Navy Finance Center, Cleveland,
(vii) Center for Naval Analysis,
(viii) Institute for Defense Analysis.

| Freq | Report Type | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|
| | Enlisted | Officer | Fiscal | Requirements | Training | Miscellaneous | |
| Daily | 18 | 1 | -- | -- | -- | 1 | 20 |
| Weekly | 2 | 15 | 7 | 1 | 24 | 3 | 52 |
| Monthly | 246 | 237 | 150 | 74 | 1 | 4 | 712 |
| Quarterly | 72 | 113 | 4 | 39 | -- | 1 | 229 |
| Semi-annually | 56 | 75 | 18 | 40 | -- | 1 | 190 |
| Annually | 52 | 134 | 2 | 5 | -- | -- | 193 |
| Other | 75 | 193 | 34 | 12 | 54 | -- | 368 |
| Total | 521 | 768 | 215 | 171 | 79 | 10 | 1,764 |

Table 5. Production of Reports in Pers N, October 1972.*

*Figures taken from Pers N report #N339, "Monthly Directory of Reports."

## Naval Personnel and Training Laboratory

1. Brief Activity Description.

The Naval Personnel and Training Laboratory is a field activity of the Plans and Policies division of the Bureau of Naval Personnel (Pers A). It has numerous activities in research and development in the personnel and training fields and is tasked to undertake various studies for Pers A. An important function which it has been continuing for some years is its collection of copies of the enlisted master tape from Pers N on a yearly basis since 1965. Thus it has stored large volumes of historical data.

2. Data Available.

The enlisted master tape has been described briefly on pages 10-11 and is described in detail in reference 1. Cross-sectional records of the Navy are available on these tapes as of 30 June each year from 1965 to the current year. Data for each year is available on between 18 to 27 reels of tape for a given year. Also available are tapes which give monthly changes in enlisted personnel strength. These tapes are complete from August 1962 and now consist of 305 reels of tape.

The Naval Personnel and Training Laboratory Data comprise the largest source of historical data that is known to exist in the Navy in machine readable form.

3. Documentation.

The enlisted master tapes are described in detail in reference 1. No concise documentation is available for the change tapes.

4. Liaison.

Requests for information or data should be addressed to:

Naval Personnel and Training Laboratory
San Diego, California 92152
Attention: Mr. J. Silverman, Program Director
Phone: 714-225-7370 (Autovon 952-7370)

5. Current Users.

This data base is currently used internally in the Laboratory in numerous research areas, and outside by the Navy Medical Neuropsychiatric Research Unit (San Diego) and the Institute for Defense Analysis.

## Naval Personnel Research and Development Laboratory

1. Brief Activity Description.

The Naval Personnel Research and Development Laboratory is a field activity of the Plans and Policies division of the Bureau of Naval Personnel (Pers A). A major area of its activity is in determining ship and shore manning levels, but is involved in numerous areas in manpower and personnel.

2. Data Available.

This laboratory is currently developing a data base called the "Naval Occupational Data Bank," which will contain responses to job task inventory questionnaires which are sent to fleet personnel to obtain data on current performances in current jobs. This data base is in the development stage and should be operational in July 1973.

3. Documentation.

See 4 below.

4. Liaison.

Information concerning data and documentation in this new data system can be obtained from:

Commanding Officer
Naval Personnel Research and Development Laboratory
Washington, D. C. 20390
Attention: Mr. A. L. Blanks
Phone: 202-433-2501

## Office of Assistant Deputy of Chief for Manpower
## Office of Chief of Naval Operations

1. Brief Activity Description.

This office primarily deals with manpower requirements within the Navy, but works closely with the Bureau of Naval Personnel, whose main task is to obtain people to fill the requirements put forward by this office. Its tasks are complex and involve readiness factors, budget restrictions, and conflicting objectives in determining manpower requirements.

2. Data Available.

Much of the data on personnel availability is obtained from the enlisted master tape at Pers N. Also available is information on billet structure. All information required to fill a billet and how the billet fits into the activity is kept. Such information is available for every billet, both officer and enlisted, in the Navy. Complete activity listings are available. Only current data is maintained, which is updated twice-weekly. Historical tapes on billets information are forwarded to the Naval Reserve Manpower Center, Bainbridge.

3. Documentation.

Potential users should consult reference 3, OPNAVINST 1000.16B which can be obtained from

Supply and Fiscal Department, Code 514.32
NAVSTA
Washington, D. C. 20390

4. Liaison.

Written requests for data should be made to:

Assistant Deputy Chief for Manpower, OP102
Office of Chief of Naval Operations
Washington, D. C. 20390

Information can be obtained by calling:

(i) Mr. W. Gerade OX7-4667 (Autovon 227-4667)

or (ii) LCDR P. Woods OX4-2341 (Autovon 224-2341).

## Naval Training Command Data Services Center

1. Brief Activity Description.

This Data Services Center reports to the Chief of Naval Training and is located in Pensacola, Florida. It has the responsibility of maintaining records on all students and flight instructors in the Naval Aviator and Naval Flight Officer Programs, and on students and personnel in the Naval Communication Training Center in Pensacola.

2. Data Available.

Data is available on individuals undergoing pilot and navigation training. This is kept in the Naval Aviation Training Information System (or NATIS, see ref. 4). The personnel master file has 98 data elements per record and 4695 current individual records. Records are written into a history file six months after completion of training, attrition, or transfer. Records are retained on the history file for one month.

3. Documentation.

This is obtainable from the address given below in 4. The information system is described in reference 4.

4. Liaison.

Written requests for data should be addressed to:

Chief of Naval Training
Naval Training Command Data Services Center
Pensacola, Florida 32508

Information can be obtained from

(i) LCDR B. C. Miller Naval Communications Training Center
Phone: 904-452-6379 (Autovon 922-6379)

(ii) CDR H. G. Kunkler Office of Chief of Naval Training
Phone: 904-452-2305 (Autovon 922-2305)

5. Current Users.

These include training squadrons, Wing Commanders, and offices at the Chief of Naval Training and Naval Communications Training Center.

## Aerospace Psychology Laboratory
## Naval Aerospace Medical Institute

1. Brief Activity Description.

This activity collects and analyzes data on all individuals at all levels of flight training from schools to primary flight training through advanced flight training. It also collects and analyzes data on Naval Flight Officer training.

2. Data Available.

All detailed information of performance in schools and flight training is kept on each individual, together with medical information. Some 228 data elements are kept on each record which makes up the "Psychology Data Bank," Partial data is available from 1947, and complete data from 1957. Over 50,000 records are available.

3. Documentation.

Numerous research reports refer to the data base, and information on these can be obtained from the address in 4.

4. Liaison.

For further information contact either

(i) LCDR N. Lane Phone 904-452-3656 (Autovon 922-3656)

(ii) Rosalie K. Ambler, Head, Personnel Research Division
Phone 904-45204156 (Autovon) 922-4156)

Address: Naval Aerospace Medical Institute
Pensacola, Florida

5. Current Users.

These include in-house staff researchers, and external users such as training commands, Navy Safety Center, and Readiness Air Groups.

## Marine Corps Automated Data Center

1. Brief Activity Description.

The Marine Corps Automated Data Center acts as the central data source on all personnel in the Marine Corps.

2. Data Available.

The center keeps records on each individual in the Marine Corps including such information as name, identification, education, rank, etc. The master file has approximately 2500 bytes of record on each of approximately 200,000 individuals. It is constantly updated on a daily basis. The master file tapes are located in Kansas City, with an extracted portion of each record kept on tape and disk at Headquarters Marine Corps in Washington, D. C.

3. Documentation.

See 4 below.

4. Liaison.

All requests for information and documentation should be made to:

Manpower Management Information Systems Branch
Code A01M
Headquarters Marine Corps
Washington, D. C. 20380
Phone: OX4-2074 (Autovon 224-2074).

5. Current Users.

The Marine Corps is the only current user of this data base.

## Bureau of Medicine and Surgery
## Department of the Navy

1. Brief Activity Description.

As the name implies the Bureau of Medicine and Surgery is responsible for the health care of all Navy and Marine Corps personnel. All professional medical, dental and nursing personnel in the Navy are in this department.

2. Data Available.

Records on all individuals in the medical corps, nurse corps and medical services corps are kept as well as manpower authorizations and workload data for each unit. Two years of manpower listings, three years of manpower authorizations and eight years of work load data are available.

3. Documentation.

See 4 below.

4. Liaison.

Written requests for data or documentation should be made to:

Director, Manpower Requirements Division
Bureau of Medicine and Surgery
Washington, D. C. 20390

Information can be obtained by calling:

LCDR R. A. Marin, MSC 202-254-4157 (Autovon 294-4157)

5. Current Users.

These include mostly internal administrative users.

## Navy Recruiting Command

1. Brief Activity Description.

The Navy Recruiting Command has responsibility for obtaining recruits in sufficient numbers and of the required types and quality to fill Navy personnel requirements. They assign recruiters to stations nation wide and are responsible for the entire Navy recruiting system.

2. Data Available.

The Recruiting Command is currently developing (from July 1972) a Recruiting Data System, which will contain personal information on individuals recruited into and losses from the various recruiting centers. Since it is currently in the development stage few details can be given at this time.

3. Documentation.

Since the system is new and still being developed it has not yet been documented.

4. Liaison.

Information on this new system can be obtained from:

LCDR W. F. Ford, Director
Recruiting Data System
Navy Recruiting Command
Washington, D. C. 20370
Phone: 202-692-4656 (Autovon 222-4656)

5. Current Users.

When fully implemented it is expected that most users will be internal, with Bureau of Naval Personnel being the chief external user.

## U.S. Army Recruiting Command
## Automatic Data Processing Division

1. Brief Activity Description.

This activity processes data on all persons processed through the Armed Forces examining and entrance stations (AFEES). Thus, it has information on recruits to all branches of military service as well as certain other non military government agencies.

2. Data Available.

Data is available from the Mechanized Reporting System (MRS), and consists of individual medical, mental and moral information pertaining to examinations, inductions and enlistments by AFEES. One hundred and twelve pieces of information are kept on each individual and are well documented (see 4 below). The information is continually being updated.

3. Documentation.

The data available in this system are well documented in references 5 and 6. These can be obtained from the U.S. Army Recruiting Command, Hampton, Virginia 23369.

4. Liaison.

Written requests for data should be made to

Department of the Army
D.A.P.E.
Washington, D. C. 20310

Information can be obtained from

L. P. Granning, Chief
ADP Division
U.S.A. Recruiting Command
Hampton, Virginia 23369

Phone: 703-244-5014 (680-4434)

5. Current Users.

This data base is used by numerous departments in the Army, Navy, Air Force and OSD.

## Maintenance Support Office
## Department of the Navy

1. Brief Activities Description.

This activity is responsible for collecting Maintenance and Supply Information related to repairs for all ships and Navy aircraft. Data includes spare parts as well as manhours expended in making repairs.

2. Data Available.

This includes both current and historical aggregated data by breakdown for equipments, ship, aircraft, rate, and labor record. Historical data is from 1965 with approximately 2.5 million entries per month updated daily as received. Data is stored mainly sequentially on tape files and is available by request with delay time dependent on priority (2-3 weeks for routine requests).

3. Documentation.

The system is documented in references 7 and 8.

4. Liaison.

Written request for access to data should be made to:

Mr. D. G. Redmond, Code 311
Maintenance Support Office
Mechanicsburg, Pennsylvania 17055
(Autovon 277-2014 or 277-3124).

5. Current Users.

These include all Navy units, Army, DOD and civilian contractors.

## Personnel Accounting Machine Installation U.S. Pacific Fleet

1. Brief Activity Description.

This activity is responsible for maintaining current duty assignment data on enlisted personnel assigned to the Pacific Fleet.

2. Data Available.

This includes current operating data only on individuals and aggregated groups. Data is stored sequentially on tape, disc, or paper and is available by request with delay time from one day to two weeks.

3. Documentation.

The system is documented in reference 9 which is available from BUPERS Pers N.

4. Liaison.

Written request for access to data should be addressed to R. Parker. Director Production Department or W. S. Richardson, PAMI, U.S. Pacific Fleet, San Diego, California 92160. Telephone number is 714-437-6786 or Autovon 951-6786.

5. Current Users.

These are various internal sections including Data Conversion Department Research System, etc., as well as external organizations including Bureau of Naval Personnel and Commander-in-Chief, Pacific Fleet.

## Personnel Accounting Machine Installation
## U.S. Atlantic Fleet

1. Brief Activity Description.

This activity is responsible for maintaining current duty assignment data on enlisted personnel assigned to the Atlantic Coast.

2. Data Available. This includes current operating data on individuals only. Data is stored sequentially on tape and is available if requested from Chief of Naval Personnel (Pers N).

3. Documentation.

System is documented in reference 9.

4. Liaison.

Written request for data or documentation should be made to:

Chief of Naval Personnel
Pers N
Department of the Navy
Washington, D. C. 20370

5. Current Users. These include internal research section and organizations including Bureau of Naval Personnel and Commander in Chief, Atlantic Fleet.

## Federal Contract Research Centers (FCRC)

FCRC's are under contract with the government to do research and analysis on many problems that are of interest to the Department of Defense and the various services. Some of the organizations which are (or have been) in this category and the branches of service they are associated with are:

| | | |
|---|---|---|
| Institute for Defense Analyses | (IDA) | - DOD |
| Center for Naval Analyses | (CNA) | - Navy |
| Research Analysis Corporation | (RAC) | - Army |
| RAND Corporation | (RAND) | - Air Force |
| Human Resources Research Organization | (HumRRO) | - Army |

Data Available.

FCRC's are for the most part users of data rather than producers; however, as the need arises data is accumulated and stored in various forms and may be made available to other researchers. Of greater interest is the fact that due to their continuing use of Defense Department data of all types they are invaluable sources of information about the acquisition and use of such data. In addition, from time to time these organizations will develop data of their own for a particular study or project which may be useful to other researchers. In any event, researchers unfamiliar with past Defense Department research should establish contact with the appropriate FCRC's, review the past work which is related to the present project, and obtain as much information as possible about the relevant sources of data including a rundown on any particular difficulties that can be expected in the

acquisition, reliability, or interpretation of that data. The time spent in doing this will be well worth the effort in the elimination of having to learn from scratch what these experienced organizations have already learned.

Both CNA and RAC have certain personnel data. Further information on reports and documentation can be obtained from:

Dr. Herschel Kanter, Director
Institute of Naval Studies
Center for Naval Analyses
1401 Wilson Boulevard
Arlington, Virginia 22209

Phone: 703-524-9400 (Autovon 225-9241).

Mr. H. M. Pitcher
Program Analysis Division
Institute for Defense Analyses
400 Army Navy Drive
Arlington, Virginia 22202

Phone: 703-558-1000.

4. Interpretation of Data.

During the past few years the author has had a number of occasions to use data from both the Navy and Marine Corps. All data sources are, of course, "contaminated" with numerous hidden factors and it is the purpose of this section to point out a few which have come to light to the author.

Let us take as our first example the determination of a simple number, the total number of enlisted men in the Navy at some given point in time. A simple approach to obtain this number is to sum the number of individual records on the enlisted master tape, and a potential user might ask for this number. It must be remembered that the tape is designed for daily administrative use, and an important Navy policy which must be taken into consideration is that if an enlisted man, on completion of his active duty obligation, reenlists within 90 days, he is considered to have had uninterrupted service. Thus, the records of all personnel who end their obligated service are kept on the tape for 90 days (and are called lost-holds). Thus, by simply summing the number of records on the tape the total Navy enlisted force will be over-estimated by a considerable number. Of course, all lost-holds are flagged and it is easy to not count them. But the point to be made is that the asking of a simple question without probing deeper can lead to misleading answers.

A second example of a potential problem area is illustrated by Table 3. This shows the cross-sectional "age distribution" of Boatswain's Mates as of June 30, 1971. However, the length of service here is based on the "pay entry base date" (PEBD) which is that date on which the

individual entered the Navy for pay purposes. However, each individual has another important date called his "active duty base date" (ADBD) which is that date from which his active duty is counted. These two dates can be considerably different, especially for people in the Naval Reserve. Both dates have importance in different problems and one must know which date is the relevant one for the problem at hand.

A third example of a somewhat similar nature is a problem in determining officer promotion rates. One might attempt to do this by finding the number of officers promoted from a given rank to the next one in a given period (say a fiscal year) and dividing this by the number of officers in the lower rank at the end of the previous fiscal year. However, in determining the number promoted great care must be taken to find out just what the number one obtains refers to. The Navy gives temporary promotions and permanent promotions, and these become effective often at quite different times depending on if one obtains promotion times for pay purposes, or promotion times for administrative purposes. The number promoted permanently from LCDR to CDR whose date for pay purposes is between July 1 of a given year and June 30 of the next year can differ considerably from the number promoted temporarily between these ranks whose date for administrative purposes is between these dates.

A fourth example is another promotion data problem. Large numbers of enlisted personnel are sent to school to be trained in some specialty such as radar or sonar technician. On successful completion of the course the men are sent out to their next duty station, but are promoted automatically on the enlisted master tape (promotion is usually

automatic with certain trade school training completion). However, the decision to promote the individual is the responsibility of his new commanding officer, and there can be any of a number of reasons why the individual may not be promoted. The commanding officer then reports to the Bureau of Naval Personnel that the individual was not, in fact, promoted. At this point Pers N "corrects" his record on the tape and this shows up as a demotion. This is one example of what can happen when one obtains data from a system where management is "by exception." For routine operations such a system has many advantages. The potential research user should find out about the operations of the system and interpret his data accordingly.

# REFERENCES


1. "Manual of the Active Duty Enlisted Magnetic Tape Record," NAVPERS 15,949C of July 1968, with relevant changes. Bureau of Naval Personnel, Washington, D. C. 20370.

2. "Monthly Directory of Reports," N399 of October 1972. Bureau of Naval Personnel, Washington, D. C. 20370.

3. OPNAVINST 1000.16B, Supply and Fiscal Department, Code 514.32. NAVSTA, Washington, D. C. 20390.

4. "Naval Aviation Training Information System Manual," CNATRAINST 5230.1 of 18 May 1972. Chief of Naval Air Training, Naval Air Station, Pensacola, Florida 32508.

5. "Mechanized Reporting System Users Information Guide," USAREC Pamphlet Number 680-1 of 1 July 1972. U.S. Army Recruiting Command, Hampton, Virginia 23369.

6. "USAREC Mechanized Reporting System," USAREC Regulation Number 680-1 of 1 July 1972, U.S. Army Recruiting Command, Hampton, Virginia 23369.

7. MSOINST 4790.2 of 24 August 1972. Maintenance Support Office, Mechanicsburg, Pennsylvania 17055.

8. "Manual for the Ships' MDCS," OPNAV 43P2, Maintenance Support Office, Mechanicsburg, Pennsulvania 17055.

9. "MAPMIS Manuals NAVPERS 15.642, Part I & II," Bureau of Naval Personnel (Pers N), Washington, D. C. 20370.

10. "Navy Manpower and Personnel Management Information System (MAPMIS)," Chief of Naval Personnel, Office of Management Information (Pers N), Bureau of Naval Personnel, Washington, D. C. 20370.

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ABSTRACT

This report contains information on the availability of manpower and personnel data in the Navy and Marine Corps and at Federal Contract Research Centers. The report includes a brief description of various kinds of data, summaries of various data banks, and some comments on the use of personnel data.

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